

Work Order ID 50717

July 21, 2009 12:37:51 PM

Page 1

Item ID: D2574
Revision ID: E
Item Name: Saddle, Aft In 205

Accept

Setup Start
Stop

Start Date: 07/22/2009 Start Qty: 8.00
Required Date: 07/31/2009 Req'd Qty: 8.00

Cust Item ID:
Customer:

Reference:

Approvals: Process Plan: *mf*
QC:

Date: 09-07-21 Tooling:
Date: SPC (Y/N):

Date:
Date:

Run Start
Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D2574	Rev E

100

0.00



HAAS CNC VERTICAL MACHINING #1

HAAS I

Memo

0.00

HAAS CNC vertical machine #1

Program Batch No. 50717 Double check by: SL 1-Machine Step No 1 per Folio FA051 and inspect per attached Dimension Sheets 2-Machine Step No 2 per Folio FA051 and inspect per attached Dimension Sheets 3-Machine Step No 3 per Folio FA051 and insp

SL / mf

15 0
09/07/31

110

0.00



CONVENTIONAL MILLING MACHINE

Mill Conv

Memo

0.00

Conventional Milling Machine

Machine keyway as per dwg D2573 & D2574

mf / SL

09/07/31

15 0

120

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

mf / SL

09/07/31

15 0

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 50717

July 21, 2009 12:37:51 PM



Page 2

Item ID: D2574

Accept



Setup Start



Revision ID: E

Stop



Item Name: Saddle, Aft In 205

Start Date: 07/22/2009 Start Qty: 8.00



Cust Item ID:

Required Date: 07/31/2009 Req'd Qty: 8.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

ML 04/08/02

15

0

Quality Control

140

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

BK 09-08-7

(15)

Hand Finishing

150

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

0.00

Powder Coating

START TIME:

1:00pm

OVEN TEMPERATURE:

11:30pm

FINISH TIME:

320°F

M112148 09-08-0.4 (15) JY

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 50717

July 21, 2009 12:37:51 PM



Page 3

Item ID: D2574

Accept



Setup Start



Revision ID: E

Stop



Item Name: Saddle, Aft In 205

Start Date: 07/22/2009 Start Qty: 8.00



Cust Item ID:

Required Date: 07/31/2009 Req'd Qty: 8.00

Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

PR 09-08-11 (15)

170

Identify as per dwg & Stock Location: 434

0.00



Packaging

Memo

0.00

Packaging

9/8/09 (15) 50

180

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

MF 09-08-06 11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

July 21, 2009 12:37:51 PM

Page 1

Work Order ID: 50717

Parent Item: D2574RevE

Parent Item Name: Saddle, Aft In 205

Comments:

Start Date: 07/22/2009

Required Date: 07/31/2009

Start Qty: 8.00

Required Qty: 8.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D6101-005RevA		Manufactured	No			110	Each	-1.0000	8.0000			



Saddle Billet



Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

MAT

46411

-1

-1

mf 07/27/30

15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order: 50717
Description: Saddle, Aft Inboard	Part Number: D2574
Inspection Dwg: D2574 Rev. E	Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2574 Rev. E and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				1	2	3	4		
A	0.438	0.443		.440	.440	.440	.440		
B	1.745	1.755		1.748	1.747	1.750	1.750		
C	3.495	3.505		3.499	3.500	3.500	3.500		
D	1.745	1.755		1.747	1.747	1.750	1.750		
E	7.990	8.010		8.003	8.001	8.000	8.000		
F	0.490	0.510		.502	.500	.500	.500		
G	0.257	0.262		.260	.260	.260	.259		
H	0.375	0.380		.377	.377	.377	.376		
I	0.490	0.510		.499	.503	.503	.503		
J	1.174	1.184		1.180	1.181	1.181	1.179		
K	0.558	0.578		.568	.570	.570	.571		
L	1.174	1.184		1.178	1.181	1.181	1.179		
M	1.365	1.375		1.370	1.369	1.369	1.370		
N	2.495	2.505		2.499	2.500	2.500	2.500		
O	4.119	4.129		4.124	4.124	4.124	4.124		
P	0.115	0.135		.126	.127	.126	.125		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.250	.251	.251	.250		
S	0.115	0.135		.126	.126	.123	.124		
T	0.178	0.198		.188	.188	.188	.188		
U	3.210	3.250		3.229	3.228	3.229	3.228		
V	0.230	0.250		.231	.230	.231	.240		
W	0.115	0.135		.131	.133	.127	.126		
X	0.307	0.312		.308	.310	.310	.310		
Y	0.760	0.765		.760	.760	.760	.760		
Z	0.352	0.372		.363	.364	.363	.363		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.625	.622	.622	.625		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.250	.250	.250	.245		
AE	1.500	1.520		1.515	1.516	1.516	1.514		
AF	0.115	0.135		.127	.127	.130	.130		
AG	0.240	0.280		.270	.255	.260	.260		
AH	0.240	0.260		.246	.244	.246	.246		
AI	2.000	2.020		2.004	2.006	2.013	2.007		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by:	mf
Date:	09/07/09

Audited by:	mf
Date:	09/08/02

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.27	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

DART AEROSPACE LTD		Work Order:	
Description: Saddle, Aft Inboard		Part Number: D2574	
Inspection Dwg: D2574 Rev. E		Page 1 of 1	

Inspect dimensions highlighted on inspection sheet drawing D2574 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.438	0.443		.440	.440	.440	.440		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.000	8.000	8.000	8.000		
F	0.490	0.510		.500	.500	.500	.498		
G	0.257	0.262		.259	.259	.259	.259		
H	0.375	0.380		.376	.376	.376	.376		
I	0.490	0.510		.503	.500	.500	.499		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		.572	.568	.567	.567		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.365	1.375		1.370	1.370	1.370	1.370		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	4.119	4.129		4.124	4.124	4.124	4.124		
P	0.115	0.135		.125	.125	.125	.125		
Q	0.115	0.135		.130	.130	.130	.130		
R	0.240	0.260		.251	.250	.250	.250		
S	0.115	0.135		.124	.123	.123	.123		
T	0.178	0.198		.188	.188	.188	.188		
U	3.210	3.250		3.228	3.228	3.228	3.228		
V	0.230	0.250		.237	.237	.239	.237		
W	0.115	0.135		.126	.130	.131	.126		
X	0.307	0.312		.310	.310	.310	.310		
Y	0.760	0.765		.760	.760	.760	.760		
Z	0.352	0.372		.363	.365	.364	.364		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.626	.626	.624	.625		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.245	.244	.245	.246		
AE	1.500	1.520		1.515	1.515	1.515	1.515		
AF	0.115	0.135		.130	.130	.130	.130		
AG	0.240	0.280		.260	.260	.260	.260		
AH	0.240	0.260		.247	.248	.249	.246		
AI	2.000	2.020		2.005	2.005	2.005	2.005		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by:	SL
Date:	09/07/30

Audited by:	mf
Date:	09/08/02

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.27	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

DART AEROSPACE LTD	Work Order:	
Description: Saddle, Aft Inboard	Part Number:	D2574
Inspection Dwg: D2574 Rev. E		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2574 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.438	0.443		.440	.440	.440	.440		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.000	8.000	8.000	8.000		
F	0.490	0.510		.499	.498	.499	.500		
G	0.257	0.262		.259	.259	.259	.259		
H	0.375	0.380		.376	.376	.376	.376		
I	0.490	0.510		.500	.499	.499	.499		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		.568	.566	.566	.567		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.365	1.375		1.370	1.370	1.370	1.370		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	4.119	4.129		4.124	4.124	4.124	4.124		
P	0.115	0.135		.125	.125	.126	.126		
Q	0.115	0.135		.130	.130	.130	.130		
R	0.240	0.260		.250	.250	.250	.250		
S	0.115	0.135		.124	.123	.124	.122		
T	0.178	0.198		.188	.188	.188	.188		
U	3.210	3.250		3.228	3.228	3.228	3.228		
V	0.230	0.250		.238	.238	.239	.237		
W	0.115	0.135		.126	.127	.128	.126		
X	0.307	0.312		.310	.310	.310	.310		
Y	0.760	0.765		.760	.760	.760	.760		
Z	0.352	0.372		.363	.365	.364	.364		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.624	.625	.625	.625		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.245	.245	.244	.245		
AE	1.500	1.520		1.515	1.515	1.515	1.515		
AF	0.115	0.135		.130	.130	.130	.130		
AG	0.240	0.280		.260	.260	.260	.260		
AH	0.240	0.260		.248	.250	.248	.248		
AI	2.000	2.020		2.005	2.005	2.005	2.005		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by:	SL
Date:	09/07/30

Audited by:	mf
Date:	09/08/102

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.27	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

DART AEROSPACE LTD		Work Order:	
Description: Saddle, Aft Inboard		Part Number:	D2574
Inspection Dwg: D2574 Rev. E		Page 1 of 1	

Inspect dimensions highlighted on inspection sheet drawing D2574 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.438	0.443		.440	.440	.440			
B	1.745	1.755		1.750	1.750	1.750			
C	3.495	3.505		3.500	3.500	3.500			
D	1.745	1.755		1.750	1.750	1.750			
E	7.990	8.010		8.000	8.000	8.000			
F	0.490	0.510		.500	.500	.502			
G	0.257	0.262		.259	.259	.259			
H	0.375	0.380		.376	.376	.376			
I	0.490	0.510		.500	.499	.499			
J	1.174	1.184		1.179	1.179	1.179			
K	0.558	0.578		.568	.567	.566			
L	1.174	1.184		1.179	1.179	1.179			
M	1.365	1.375		1.370	1.370	1.370			
N	2.495	2.505		2.500	2.500	2.500			
O	4.119	4.129		4.124	4.124	4.124			
P	0.115	0.135		-.125	-.125	-.125			
Q	0.115	0.135		-.130	-.130	-.130			
R	0.240	0.260		-.250	-.250	-.250			
S	0.115	0.135		-.123	-.123	-.123			
T	0.178	0.198		-.188	-.188	-.188			
U	3.210	3.250		3.228	3.228	3.228			
V	0.230	0.250		-.236	-.236	-.236			
W	0.115	0.135		-.126	-.123	-.123			
X	0.307	0.312		-.311	-.311	-.310			
Y	0.760	0.765		-.760	-.760	-.760			
Z	0.352	0.372		-.365	-.365	-.365			
AA	0.470	0.530		-.500	-.500	-.500			
AB	0.615	0.635		-.626	-.625	-.626			
AC	0.053	0.073		-.063	-.063	-.063			
AD	0.240	0.260		-.245	-.245	-.245			
AE	1.500	1.520		1.514	1.515	1.515			
AF	0.115	0.135		-.130	-.130	-.130			
AG	0.240	0.280		-.260	-.260	-.260			
AH	0.240	0.260		-.248	-.248	-.248			
AI	2.000	2.020		2.004	2.005	2.005			
AJ	0.023	0.043		.033	.033	.033			
Accept/Reject									

Measured by:	JL
Date:	09/07/31

Audited by:	mp
Date:	09/08/02

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.27	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

#50717

RELEASED

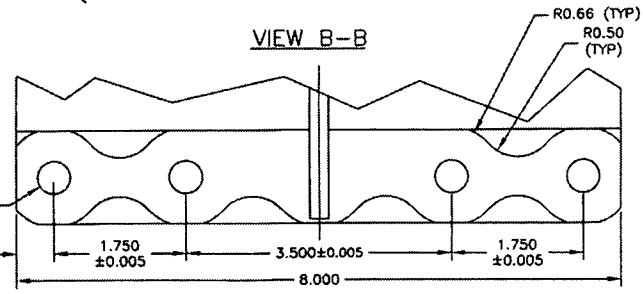
05.12.06

NOTES

MATERIAL: 7075-T7351 (QQ-A-250/12)
(REF DART SPEC. D6102-003)
FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
BREAK ALL SHARP EDGES 0.010 TO 0.020
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

- 1 ENGRAVE PART AND BATCH NUMBER IN THIS AREA TO MAX DEPTH OF 0.010
- 2 CHAMFER 0.063" x 45° AROUND THIS SURFACE (TYPICAL 2 PLACES)
- 3 CHAMFER 0.063 x 45° ALL AROUND
- 4 CHAMFER 0.033 x 45° (SEE DETAIL C)

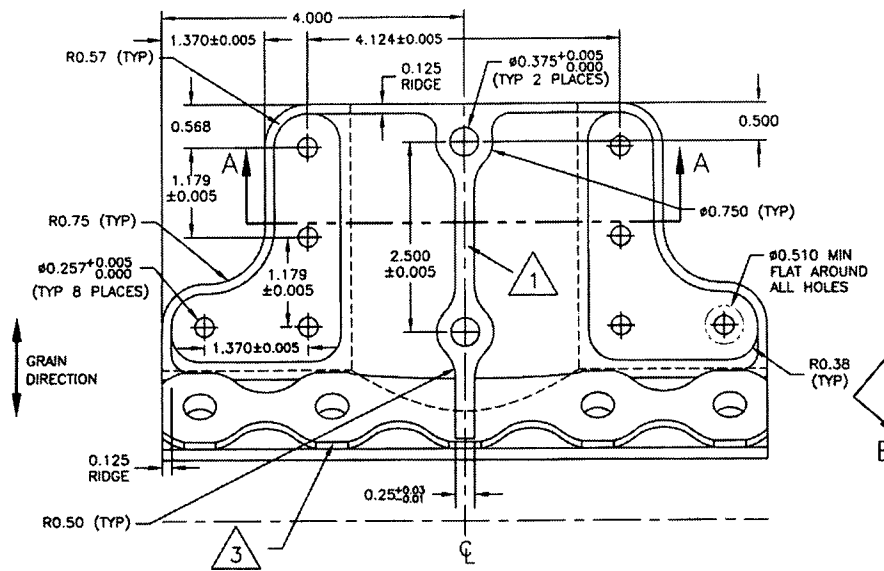
VIEW B-B



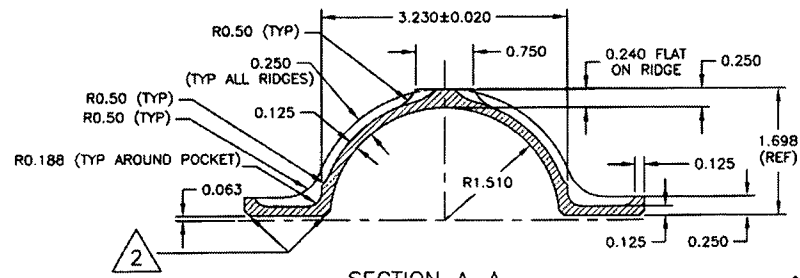
E	05.07.13	ADD CHAMFER ON RIDGE NOTE 4
D	02.09.06	ADD RIDGES; TIGHTEN TOLERANCES
C	99.10.22	INCORP. DEO 9123/9079/9102 ADD DIMENSIONS PER TSR A1177
B	96.12.02	ADD GRAIN DIR., 0.438 WAS 0.425
A	96.09.16	NEW ISSUE

DESIGN	DS	DRAWN BY	PH	DART	DART AEROSPACE LTD.
CHECKED		APPROVED			
DATE	05.07.13	DRAWING NO.	D2574		REV. E
		TITLE	INNER AFT SADDLE		SHEET 1 OF 1
		SCALE	2:3		

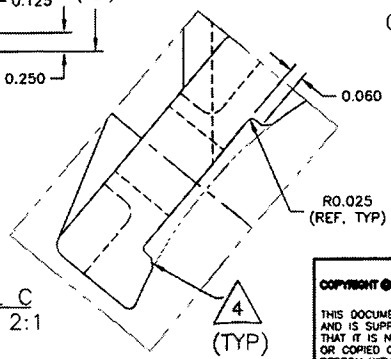
COPYRIGHT © 2005 BY DART AEROSPACE LTD.
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



SECTION A-A



DETAIL C SCALE 2:1



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries